CABL.03US01

## REMARKS

Reconsideration and further examination of this application is respectfully requested. Claims 1-24 were originally presented for examination. Claims 10-24 have been withdrawn in response to a restriction requirement. Claims 5 and 7 have been cancelled without prejudice. Claims 1-4, 6, 8 and 9 are presented for further examination.

Claims 5 and 7 were objected to in the last Office Action. Claims 5 and 7 have been cancelled without prejudice to render these objections moot.

Claims 1-4 were rejected under 35 USC § 102(e) as being anticipated by Rangan et al. Rangan discloses a system for synchronizing a continuous data stream with a continuous video stream that are delivered to a delivery point over separate delivery networks. At least one of the data streams is marked to assist in the synchronization of the data streams. As pointed out in Rangan et al., one of the problems in combining data streams is "the <u>unpredictable nature of latency</u> conditions inherent to separate media networks that may be chosen to deliver such data streams." Further, Rangan et al. states that "a typical broadcast system may experience a <u>variable latency rate</u> in a broadcast of a video stream of up to several hundred milliseconds." Further, Rangan describes latency problems with respect to the <u>Internet</u>. As stated in Rangan, "Internet delivery systems which transmit data using switched-packet-technology also experience unpredictable latency problems, similar to that described above, as well as competition from a host or other data transfer events due to the fact that, generally speaking, bandwidth must be shared."

As described in the "Summary of the Invention" of Rangan, each of the two data streams is fed into a large cache/Ram storage and buffered pipeline. See Cache/Ram 117 and buffers 131, 133 of Figure 12. "Selected data," which may comprise numbers identifying video frames, are included in the second data stream, which is the annotation data. The first data stream may be a live video data stream and includes timing markers which allows the first data stream to be combined with the second data stream using the video frame numbers. After the two data streams are fed into two separate pipeline buffers 131, 133, timing markers can be used to adjust the relative position of the data streams so that the data streams can be properly aligned. As stated in Rangan et al.,

CABL.03US01

"[R]elative positioning of the data streams is accomplished by delaying one or the other of the data streams, such as by repeating frames in the stream to be delayed." As further described by Rangan, in the "Summary of the Invention," "[T]he dynamic buffers of each of the data streams are controlled by a control module that adjusts the relative position of the two dynamic streams to accomplish synchronization according to the data read from the data streams." This allows the two data streams that are delivered by different networks having different latency effects to be synchronized even though the two data streams are not synchronously transmitted over two different channels.

Claim 1 has been amended to clearly distinguish over Rangan et al. Claim 1 has been amended to recite that the data is transferred over "an isochronous network." For example, claim 1 recites "a method for synchronizing data transferred over an isochronous network from a data source with an audio/video stream in a user system...." Further, claim 1 recites "determining latencies that exist in said isochronous network; calculating a time period based upon said latencies in said isochronous network; transmitting said data from said data source over said isochronous network ...; receiving said data at said user system over said isochronous network...."

There is no disclosure, or any suggestion, whatsoever, in Rangan et al. of the use of an isochronous network, or any network, that guarantees the timely delivery of data and elimination of unpredictable latencies. Use of the isochronous network, as set forth in claim 1, allows a determination of the latency in the isochronous network, as set forth in claim 1, so that "a time period" can be calculated "based upon the latencies of said isochronous network." Unlike the "unpredictable nature of latency conditions inherent to separate media networks that may be chosen to deliver such data streams," as described in column 2, lines 50+ of Rangan et al., the present invention utilizes an isochronous network for the delivery of data to eliminate these problems.

These problems are solved in a completely different manner by Rangan et al.

Rangan uses a large cache 117 and a data stream buffer 131 to store and buffer the data and provide for adjustment of that data in the buffer so that it is aligned with the video stream buffer. In this manner, Rangan et al. teaches away from Applicant's invention.

An advantage of the use of an isochronous network, such as claimed in claim 1, is that large buffer caches are not required to store a large amount of data. In other words, the

CABL.03US01

network and the user system because the latencies are not "unpredictable" when an isochronous network is not used, in contrast to the description in column 2, lines 50+ of Rangan et al. For example, claim 1 recites "calculating a time period based upon said latencies in said isochronous network;... transmitting said data over said isochronous network ... at a time that precedes receipt of said audio/video stream by an amount that is substantially equal to, but not less than, said time period, so that the amount of said data stored at said user system is minimized." This has not been disclosed or suggested, in any manner, by Rangan et al.

Further, claim 1 is a system in which data, from a data source, is requested by the user. For example, claim 1 recites "requesting said data from said data source that is connected to isochronous network." Rangan et al. does not disclose a system for requesting data from data source. Rather, a request can be made via input 141, Figure 12, of Rangan to the cache 117 to combine data that has already been transmitted from the data source and already received by the user system (Cache/Ram 117). In that regard, Rangan et al. appears to be a system that combines a continuous data stream with a video stream. There is no disclosure, or suggestion, in Rangan et al. of transmitting data from a data source when that data is requested from a data source.

Claims 5, 7 and 8 were rejected under 35 USC § 103(a) as being unpatentable over Rangan et al. in view of Del Sesto et al.

Del Sesto does not make up for the deficiencies of Rangan et al. Del Sesto et al. discloses a system in which a broadcast receiver offers a viewer the option to execute an interactive application within a first defined time period. If the viewer elects to execute the interactive application within the first defined time period, the broadcast receiver initiates the execution of the interactive application.

There is no disclosure, or suggestion, in Del Sesto et al. of the use of an isochronous network. Further, Del Sesto et al. does not request data from a data source, but rather downloads the data from a broadcast server 120 which is sent to the data receiver 140. On request by the user, the broadcast receiver 140 executes the interactive application. Further, a time period is not calculated based upon latency of an isochronous network. There is no disclosure or suggestion in Del Sesto et al. of calculating a time

## BEST AVAILABLE COP'

CABL.03US01

period or "transmitting said data over said isochronous network to said user system ... at a time that precedes receipt of said audio/video stream by an amount that is substantially equal to, but not less than, said time period, so that the amount of said data stored at said user system is minimized."

Hence, even assuming arguendo, that Rangan et al. and Del Sesto et al. could be combined, as suggested by the Examiner, such a combination would still not disclose the invention set forth in claim 1.

Claims 2-4, 6, 8 and 9 are dependent upon claim 1 and are considered to be allowable for the same reasons as claim 1.

For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Dated this 20th day of January 2006.

Respectfully submitted,

By:

William W. Cochran Registration No. 26,652

Cochran Freund & Young LLC 2026 Caribou Drive, Suite 201

Fort Collins, CO 80525 Phone: (970) 492-1100 Fax: (970) 492-1101 Customer No.: 27479